

## WHAT IS CLAIMED IS:

1. A method for cardiovascular disease assessment in an individual, comprising the steps of:

a. detecting the presence or absence of a fragment encoding a polymorphic alpha-2C ( $\alpha_{2C}$ DEL322-325) adrenergic receptor in a sample from an individual; and

b. detecting the presence or absence of a fragment encoding a polymorphic beta-1 adrenergic receptor ( $\beta_1$ Arg389) in a sample from the individual.

2. The method according to claim 1, wherein the sample comprises blood sample, body fluid, tissue sample, or combinations thereof.

3. The method according to claim 1, wherein the fragment comprises DNA, RNA, protein, or combinations thereof.

4. The method according to claim 1, wherein the cardiovascular disease comprises stroke, vascular embolism, vascular thrombosis, heart failure, cardiac arrhythmias, myocardial infarction, myocardial ischemia, angina, hypertension, hypotension, shock, sudden cardiac death, or combinations thereof.

5. The method according to claim 4, wherein the cardiovascular disease is heart failure.

6. A method for delaying development of cardiovascular disease in an individual, comprising the steps of:

a. detecting the presence or absence of a fragment encoding a polymorphic alpha-2C ( $\alpha_{2C}$ DEL322-325) adrenergic receptor in a sample from an individual;

b. detecting the presence or absence of a fragment encoding a polymorphic beta-1 adrenergic receptor ( $\beta_1$ Arg389) in a sample from the individual; and

c. selecting a therapy regimen for the individual based on the presence or absence of  $\alpha_{2C}$ DEL322-325 and  $\beta_1$ Arg389

wherein the therapy regimen delays development of cardiovascular disease in the individual.

7. The method according to claim 6, wherein the sample comprises blood sample, body fluid, tissue sample, or combinations thereof.

8. The method according to claim 6, wherein the fragment comprises DNA, RNA, protein, or combinations thereof.

9. The method according to claim 6, wherein the cardiovascular disease comprises stroke, vascular embolism, vascular thrombosis, heart failure, cardiac arrhythmias, myocardial infarction, myocardial ischemia, angina, hypertension, hypotension, shock, sudden cardiac death, or combinations thereof.

10. The method according to claim 9, wherein the cardiovascular disease is heart failure.

11. The method according to claim 6, wherein the therapy regimen comprises administration of agonists and/or antagonists of  $\alpha_{2C}$ DEL322-325 and  $\beta_1$ Arg389.

12. The method according to claim 6, wherein the therapy regimen comprises life-style changes.

13. A method for delaying progression or early death associated with cardiovascular disease in an individual, comprising the steps of:

a. detecting the presence or absence of a fragment encoding a polymorphic alpha-2C ( $\alpha_{2C}$ DEL322-325) adrenergic receptor in a sample from an individual;

b. detecting the presence or absence of a fragment encoding a polymorphic beta-1 adrenergic receptor ( $\beta_1$ Arg389) in a sample from the individual; and

c. selecting a therapy regimen for the individual based on the presence or absence of  $\alpha_{2C}$ DEL322-325 and  $\beta_1$ Arg389

wherein progression or early death associated with the cardiovascular disease is delayed.

14. The method according to claim 13, wherein the sample comprises blood sample, body fluid, tissue sample, or combinations thereof.

15. The method according to claim 13, wherein the fragment comprises DNA, RNA, protein, or combinations thereof.

16. The method according to claim 13, wherein the cardiovascular disease comprises stroke, vascular embolism, vascular thrombosis, heart failure, cardiac arrhythmias, myocardial infarction, myocardial ischemia, angina, hypertension, hypotension, shock, sudden cardiac death, or combinations thereof.

17. The method according to claim 16, wherein the cardiovascular disease is heart failure.

18. A method of genetic counseling for cardiovascular disease in an individual, comprising the steps of:

a. detecting the presence or absence of a fragment encoding a polymorphic alpha-2C ( $\alpha_2C$ DEL322-325) adrenergic receptor in a sample from an individual;

b. detecting the presence or absence of a fragment encoding a polymorphic beta-1 adrenergic receptor ( $\beta_1$ Arg389) in a sample from the individual; and

c. counseling the individual regarding the potential risk of developing a cardiovascular disease based on the presence or absence of  $\alpha_2C$ DEL322-325 and  $\beta_1$ Arg389.

19. The method according to claim 18, wherein the sample comprises blood sample, body fluid, tissue sample, or combinations thereof.

20. The method according to claim 18, wherein the fragment comprises DNA, RNA, protein, or combinations thereof.

21. The method according to claim 18, wherein the cardiovascular disease comprises stroke, vascular embolism, vascular thrombosis, heart failure, cardiac arrhythmias, myocardial infarction, myocardial ischemia, angina, hypertension, hypotension, shock, sudden cardiac death, or combinations thereof.

22. The method according to claim 21, wherein the cardiovascular disease is heart failure.

23. The method according to claim 18, wherein the individual is a fetus.